AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended)   A method of using a tool to form an orifice through a workpiece having first and second generally planar surfaces spaced apart along a longitudinal axis with a volume of material therebetween, the method comprising:

preventing lateral movements of a workpiece with respect to a support surface;

extending a tool having a tool body comprising an elongated member having a circular cross-section defining a generally circular perimeter into the volume of material between the first and second generally planar surfaces of the workpiece to form first and second impressions in sequence, the first and second impressions being spaced apart about the longitudinal axis so that the first impression forms a first orifice wall extending between the first and second generally planar surfaces at an acute angle with respect to the first generally planar surface; and

penetrating through the first generally planar surface to the other generally planar surface;

wherein, the preventing lateral movements comprises orientating the tool having a tool axis oblique to one of the generally planar surfaces, the tool having a pilot work surface spaced from a main work surface, the pilot work surface facing the first generally planar surface of the workpiece and being disposed on a first virtual plane, the pilot work surface comprising an area bounded by a first arcuate portion of the perimeter of the tool body and a first chord connecting the first arcuate portion;

the extending comprises penetrating into the first generally planar surface with the pilot work surface and the main work surface such that the area penetrated by the pilot work surface has an area less than the area penetrated by the main work surface; and

the penetrating comprises projecting a transition work surface into the first generally planar surface of the workpiece, the transition work surface extending through the tool axis at a first oblique angle with respect to a second virtual plane contiguous to the pilot work surface.

2-3. (Canceled)

4. (Currently Amended)   The method of claim ~~3~~ 1, wherein the orientating comprises positioning the tool body at any angle from about three to about thirty degrees.

5. (Currently Amended)   ~~The method of claim 3, wherein~~ A method of using a tool to form an orifice through a workpiece having first and second generally planar surfaces spaced apart along a longitudinal axis with a volume of material therebetween, the method comprising:
        preventing lateral movements of a workpiece with respect to a support surface;
        extending a tool into the volume of material between the first and second generally planar surfaces of the workpiece to form first and second impressions in sequence, the first and second impressions being spaced apart about the longitudinal axis so that the first impression forms a first orifice wall extending between the first and second generally planar surfaces at an acute angle with respect to the first generally planar surface; and
        penetrating through the first generally planar surface to the other generally planar surface;
        wherein, the preventing lateral movements comprises orientating the tool having a tool axis oblique to one of the generally planar surfaces, the tool having a pilot work surface spaced from a main work surface, the pilot work surface facing the first generally planar surface of the workpiece;
        the extending comprises penetrating into the first generally planar surface with the pilot work surface and the main work surface such that the area penetrated by the pilot work surface has an area less than the area penetrated by the main work surface; and
        the main work surface area comprises an area approximately 1.8 times greater than the pilot work surface area.

6-8. (Canceled)

9. (Currently Amended)   The method of claim ~~7~~ 1, wherein the main work surface comprises an area bounded by a second arcuate portion of the perimeter of the tool body and a second chord connecting the second arcuate portion.

10. (Currently Amended)   The method of claim ~~7~~ 1, wherein the transition work surface comprises a surface having a first arcuate outer perimeter connecting adjacent ends of the first

and second chords and a second arcuate perimeter connecting the other adjacent ends of the first and second chords.

11. (Currently Amended)   The method of claim ~~6~~ 1, wherein the first oblique angle comprises any angle between ten to thirty degrees.

12. (Original) The method of claim 11, wherein the first oblique angle is approximately 26 degrees.

13. (Currently Amended)   The method of claim ~~3~~ 1, wherein the extending comprises projecting the main work surface into the generally planar surface of the ~~dise~~ workpiece, the main work surface extending at a second oblique angle to the first virtual plane, the second oblique angle being approximately ten percent of the first oblique angle.

14. (Original) The method of claim 1, wherein the preventing comprises providing at least one stop member on the support surface, the stop member engaging a lateral surface of the workpiece to prevent lateral movement with respect to the longitudinal axis.

15. (Original) The method of claim 1, wherein the preventing of lateral movements comprises providing pointed projections on the support surface that engage the other generally planar surface of the workpiece to prevent lateral movements thereof.

16. (Currently Amended)   The method of claim 1, wherein the penetrating comprises removing material of the workpiece so that a second orifice wall is formed between the first and second generally planar surfaces at an obtuse angle with respect to the second virtual plane.

17. (Original) The method of claim 16, wherein the acute angle is any angle from approximately 80 to approximately 87 degrees, and the obtuse angle is any angle from approximately 93 to approximately 100 degrees.

18. (Original) The method of claim 1, wherein the penetrating comprises applying a force along the tool axis of the tool body comprising a tool steel material.

19. (Canceled)